From: Smalley, Bryant [smalley.bryant@epa.gov] 8/30/2017 11:56:17 AM Sent: To: Thomas, Mark J. [Thomas.Markj@epa.gov] CC: Carroll, Craig [Carroll.Craig@epa.gov]; Smith, Monica [smith.monica@epa.gov]; Martin, John [martin.john@epa.gov]; Bernier, Roberto [bernier.roberto@epa.gov] Subject: FW: Updated IMAAC Product-resubmitting on PDFs Attachments: RFI 17 0831U IMAAC update1-SO2 and update Peroxides.pdf; RFI 17 0831U IMAAC rev0-Modeling for Cl and Peroxide.pdf Mark - The facility is Arkema Chemical Plant, Crosby TX Lat. 29.949* N Long. 95.022* W Please keep me in the loop on ETA. Bryant Smalley Oil Spill & Response Team Leader US EPA R6 214-215-1783 ----Original Message----From: Bernier, Roberto Sent: Tuesday, August 29, 2017 4:54 PM To: McAteer, Mike <mcateer.mike@epa.gov> Cc: Mason, Steve <mason.steve@epa.gov>; Leonova, Larisa <leonova.larisa@epa.gov>; Foster, Althea <Foster.Althea@epa.gov>; Smalley, Bryant <smalley.bryant@epa.gov> Subject: RE: Updated IMAAC Product-resubmitting on PDFs See pdf presentations ----Original Message----From: Bernier, Roberto Sent: Tuesday, August 29, 2017 4:48 PM To: McAteer, Mike <mcateer.mike@epa.gov> Cc: Mason, Steve <mason.steve@epa.gov>; Leonova, Larisa <leonova.larisa@epa.gov>; Foster, Althea <foster.althea@epa.gov>; Smalley, Bryant <smalley.bryant@epa.gov> Subject: RE: Updated IMAAC Product This is what we gathered from the IMAAC modeling. There are two for peroxides after updating volume down to 7,600 lbs. I'll try to email the power points again as pdfs Bullets from IMAAC plume modeling - Arkema, Crosby, TX Plant (assuming population is present) 47,000 lbs of SO2 - Prevailing winds due south within 4 hours. Death at 0.5 miles, injury possible at 3.3 mile, area of concern at 5.3 miles. Amount was reduced by a factor of 2 to account for rainout and removal of SO2 by the water surface. 300 lbs of Chlorine - Prevailing winds due south within 4 hours. Death within facility, injury possible at 0.3 miles, area of concern at 0.6 miles. 1M lbs of peroxides equivalent to 200,000 lbs of TNT (radius) 100% fatalities at 87 m Widespread fatalities at 229 m O Serious injuries at 358 m 0 Light injuries at 801 m 0 Non-explosion but degradation with water will mean acid dilution but present within the 0 near flood waters. UPDATED peroxide to 7,600 lbs (radius) 100% fatalities at 22 m 0 Widespread fatalities at 78 m Serious injuries at 120 m 0 Light injuries at 270 m 0 Non-explosion but a degradation with water will mean acid dilution but present within the near flood waters. ----Original Message----From: McAteer, Mike Sent: Tuesday, August 29, 2017 4:20 PM

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To: Bernier, Roberto <bernier.roberto@epa.gov>
Cc: Mason, Steve <mason.steve@epa.gov>
Subject: Re: Updated IMAAC Product
Can't open either. Can you give me bullet points
Sent from my iPhone
> On Aug 29, 2017, at 4:17 PM, Bernier, Roberto <br/> <br/> dernier.roberto@epa.gov> wrote:
> Both, SO2 and Cl, Peroxides
> From: Leonova, Larisa
> Sent: Tuesday, August 29, 2017 4:09 PM
> To: Rauscher, Jon <Rauscher.Jon@epa.gov>; Delgado, Eric <Delgado.Eric@epa.gov>; Bernier, Roberto
<bernier.roberto@epa.gov>
> Cc: R6HarveyENVL <R6HarveyENVL@epa.gov>
> Subject: FW: Updated IMAAC Product
> From: Miller, Timothy J CTR DTRA J9 (US) [mailto:timothy.j.miller270.ctr@mail.mil]
> Sent: Tuesday, August 29, 2017 3:53 PM
> To: Leonard.willittsjr@fema.dhs.gov<mailto:Leonard.willittsjr@fema.dhs.gov>; fema-
nwc@fema.dhs.gov<mailto:fema-nwc@fema.dhs.gov>; DTRA Ft Belvoir J3-7 Mailbox Joint Ops Center
<dtra.belvoir.J3-7.mbx.joint-ops-center@mail.mil<mailto:dtra.belvoir.J3-7.mbx.joint-ops-</pre>
center@mail.mil>>; Poland, Ronald E Jr SSG USARMY (US)
<ronald.e.poland.mil@mail.mil<mailto:ronald.e.poland.mil@mail.mil>>; Leonova, Larisa
<leonova.larisa@epa.gov<mailto:leonova.larisa@epa.gov>>;
s&tcsacreachback@st.dhs.gov<mailto:s&tcsacreachback@st.dhs.gov>
> Cc: DTRA Ft Belvoir J9 Mailbox Reachback
dtra.belvoir.J9.mbx.reachback@mail.mil<mailto:dtra.belvoir.J9.mbx.reachback@mail.mil>>>
> Subject: Updated IMAAC Product
> IMAAC Technical Operations has been asked to update a modeling product for the EPA for a hypothetical
chemical release in Crosby, TX at 1800Z. This is a request is for a single agency and only involves a
hypothetical incident at this time. The updated products are posted to the IMAAC HSIN portal and attached
here. Should the situation change, a notification informing IMAAC participants of this change (and any
additional details) will be sent out. Please inform us if another IMAAC agency has been asked to respond
to the same incident.
> <RFI_17_0831U_IMAAC_update1-S02.pptx>
> <RFI_17_0831U_IMAAC_rev0-Modeling for Cl and Peroxide.pptx>
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